



# Safety Scene

## Steel Components & Eye Safety

by Molly E. Butz

Learn why eye protection is so important when working with steel components.

**W**e've said it many times in *SBC*: We view wood and steel building components on a level playing field. It certainly comes as no surprise that many of the same safety concerns associated with fabricating wood components also apply to steel components. However, with more and more companies adding steel to their line-up, this seems like a crucial time to focus our energy on the specific hazards associated with steel component fabrication, too! So this is the first **Safety Scene** column devoted to the safety hazards inherent in operating steel truss manufacturing plants.

That being said, it's true that manufacturing steel trusses and wall panels brings up safety discussions that easily parallel wood, and it's good to keep in mind that any manufacturing situation merits thorough training and a good bit of common sense. But it's also important to recognize the differences in the hazards associated with each material, wood or steel.

### Wearing the proper PPE is your best bet for avoiding a painful trip to the doctor.

Component manufacturers that have both steel and wood operations should be especially careful about educating employees on the safety issues specific to each product. To begin with, if you plan to or are already sharing employees between your wood and steel manufacturing areas, include time for cross-training. "[Our employees'] muscles need time to acclimate [to different motions and movements], the materials are different and there are different safety issues," says Todd Gilligan, Safety Director for Cascade Mfg Co, which has separate wood and steel component plants. "Cross-training is really important."

One noteworthy cross-training safety issue in steel component manufacturing is the necessity for eye protection. Hand drilling metal screws into metal chords and webs puts a number of employees in close proximity to a common manufacturing by-product: metal shavings, shards or fragments. "Sure, we have some potential for metal shavings," Scott Ward, Southern Components Inc., whose company also manufactures both wood and steel, told *SBC* staff. That's why, in addition to gloves and hearing protection, Southern Components makes safety glasses mandatory.

And, not only are the steel shards a hazard to unprotected eyes during the drilling process, they can be a hazard once the truss is finished, too! Gilligan points out that, during the course of manufacturing, the steel shavings fall down inside of the trusses; consequently, any time a truss is lifted to be worked on, inspected or stacked "the shavings come raining down" on the workers below. Unprotected peepers can mean only one thing at that point: steel in the eye.

Now, as previously mentioned, flying and falling particles are also hazards on the wood side of things. However, metal shards present an additional and rather unpleasant to remedy concern: rust rings. If not treated promptly, metal objects react with our tears and cause rust to form around the foreign body. The resulting rust ring has the potential to cause a scar that can eventually affect a person's vision. And the worst part? (If you're squeamish, skip to the next sentences.) The ensuing drilling and scraping process to remove the object and rust ring can be rather unpleasant and often warrants heavy-duty antibiotics. So preventing a steel shaving from ending up in your eye by

wearing the proper personal protective equipment (PPE) is your best bet for avoiding a painful trip to the doctor.

As is true for any (PPE), selecting the "right" eye protection is key. It's critical that the PPE you choose are right for your employees in your facility working on your tasks. Since there are various kinds of eye protection, from non-prescription and prescription safety glasses to goggles and face shields, choosing a style that works in your plant can take some patience. "We've run the gamut," Gilligan recalls. "It feels like we've been through 40 different pairs of glasses and goggles. We even tried full face shields at one point!"

But Gilligan has taken an appropriate approach and if it takes 40 pairs, it takes 40 pairs. It's important to make sure the eye protection you choose doesn't increase or create new safety hazards and also that it fits comfortably. Let's face it, if the eye protection chosen is uncomfortable, employees are less likely to wear it regularly—if at all.

A little training goes a long way, too. Goggles or safety glasses may seem like fairly simple pieces of PPE, but your employees still need to understand how they should fit and how to take care of them. Most importantly, if you teach your employees to be aware of their environment at all times they are more likely to take caution around all kinds of hazards. Safety first! *SBC*

*Do you have a safety question or topic that pertains to cold-formed steel component manufacturing? Email [mbutz@sbcsmag.info](mailto:mbutz@sbcsmag.info).*



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### at a glance

- For manufacturers sharing shop workers between steel and wood plants, it is prudent to cross-train them on eye protection.
- When drilling metal screws into steel components, employees are exposed to metal shavings and fragments.
- If metal shards get caught in the eye, rust rings can occur.
- Beyond enforcement of PPE, the best thing you can do to encourage the use of eye protection is to find comfortable options for all shop workers.

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